CLAIMS

What is claimed is:

1. A battery system comprising:

a battery;

a thermistor, with a first end and a second end;

a memory device;

a plurality of contacts adapted to be communicatively coupled with a battery charger including

a battery data contact,

a battery clock contact; and

wherein the battery charger selectively performs at least one of clocking the memory device and reading a value of the thermistor, through one of the battery charger clock contact and the battery data contact.

2. The system according to claim 1, wherein the memory device comprises:

a data port communicatively coupled to the battery data contact and the first end of a voltage identifying element; and

a clock port communicatively coupled to the battery clock contact and the first end of the thermistor.

3. The system according to claim 2, wherein the voltage identifying element, further comprises a second end, the first end of the voltage identifying element being communicatively coupled to the battery data contact, for identifying a voltage at the battery data contact; and

a switch, communicatively coupled between the second end of the thermistor and the second end of the voltage identifying element, for selectively reading a value of the thermistor and outputting a clock signal to a memory device clock port.

4. The system according to claim 1, wherein the memory device is one of an erasable programmable read only memory (EPROM), an electrically erasable programmable read only memory (EEPROM), a non-volatile random access memory (RAM) and a FLASH memory.

5. The system according to claim 1, wherein the battery charger is one of a stand-alone charger and a host device.

6. The system according to claim 3, wherein the voltage identifying element is one of a zener diode, a resistor divider network, and a comparator.

7. A battery charging system comprising:

a battery charger;

a battery;

a thermistor, with a first end and a second end;

a memory device;

a plurality of contacts adapted to be communicatively coupled with the battery charger including

a battery data contact,

a battery clock contact; and

a memory device;

wherein the battery charger selectively performs at least one of clocking the memory device and reading a value of the thermistor, through one of the battery charger clock contact and the battery data contact.

8. The system according to claim 7, wherein the memory device is one of an erasable programmable read only memory (EPROM), an electrically erasable programmable read only memory (EEPROM), a non-volatile random access memory (RAM) and a FLASH memory.

9. The system according to claim 7, wherein the memory device comprises:

a data port communicatively coupled to the battery data contact and the first end of a voltage identifying element; and

a clock port communicatively coupled to the battery clock contact and the first end of the thermistor.

10. The system according to claim 9, wherein the voltage identifying element further comprises a second end, the first end of the voltage identifying element being communicatively coupled to the battery data contact, for identifying a voltage at a battery data contact; and

a switch, communicatively coupled between the second end of the thermistor and the second end of the voltage identifying element, for selectively reading a value of the thermistor and outputting a clock signal to a memory device clock port.

11. The system according to claim 10, wherein the voltage identifying element is one of a zener diode, a resistor divider network, and a comparator.

12. The system according to claim 7, wherein the battery charger comprises a microprocessor, a first switch, and a second switch, for selectively placing a voltage on the battery data contact.

13. The system according to claim 12, wherein the microprocessor is programmed to selectively operate the first switch and the second switch.

14. The system according to claim 13, wherein the microprocessor reads a value of the thermistor coupled to the battery clock contact in response to closing the first switch.

15. The system according to claim 13, wherein the microprocessor generates a clock signal on a node coupled to the clock contact in response to closing the second switch.

16. The system according to claim 12, wherein said microprocessor comprises an analog-to-digital converter and an output, the analog-to-digital converter and the output both coupled to the clock contact.

17. A battery charger comprising:

a data contact for receiving a battery data contact;

a clock contact for receiving a battery clock contact;

at least two switches, communicatively coupled to the data contact, for selectively placing a voltage on the data contact; and

a microprocessor, communicatively coupled to the data contact, the clock contact, and the two switches, for selectively performing at least one of outputting a clock signal to the clock contact and reading a value of a battery thermistor coupled through one of the battery clock contact and the battery data contact.

18. The battery charger according to claim 17, wherein the microprocessor is programmed to selectively operate the two switches.

19. The battery charger according to claim 18, wherein the microprocessor reads a value of the thermistor coupled to the battery clock contact in response to closing a first switch of the two switches.

20. The battery charger according to claim 18, wherein the microprocessor generates a clock signal on a node coupled to the clock contact in response to closing a second switch of the two switches.

21. The battery charger according to claim 20, wherein the microprocessor comprises an analog-to-digital converter and an output, the analog-to-digital converter and the output both coupled to the clock contact.